Community Linkage Through Navigation to Reduce Hospital Utilization Among Super Utilizer Patients: A Case Study

Ashley J. Shearer MSW, LCSW; Caryn L. Hilmes MSW, LCSW; and Martha N. Boyd, CHW

Abstract

This paper describes a program model that uses hospital- and community-based patient navigators and social workers to link super utilizers of the hospital system with existing community resources to improve access to services and appropriate care while lowering hospital utilization. A case study is used to illustrate a typical super utilizer patient who is homeless and has psychosocial issues. The navigator's and social worker's roles and approaches are described, and specific community linkages for this case are listed. The navigator discusses her experience and lessons learned working with this patient. Program and patient outcomes are shared.

Highlights

- *A hospital- and community-based navigation program connects super utilizer patients to existing community supports, increasing access to care and services while reducing unnecessary hospital utilization.*
- *A patient-centered, harm reduction framework and low-threshold navigation services can increase super utilizer engagement.*
- *A case study illustrates a typical super utilizer profile, examples of community linkages, and reduction in utilization.*

Introduction and Program Model

In Hawai'i, emergency department and hospital utilization by those who are homeless increases every year.[1] Between January 2016 and September 2018, The Queen's Medical Center (QMC) was the site of 59% of all emergency department visits by people who are homeless.[2] In response to this trend, QMC developed Queen's Care Coalition to provide post-discharge navigation services by community health workers (navigators) to high-need, high-cost patients who account for a disproportionately high amount of health care utilization.[3] The model of care deployed to address this growing concern reaches outside the confines of the traditional acute care facility to engage patients in the context of their daily lives. Deeply familiar with this context, community health workers see past the boundaries of traditional medical care. They dive deeper into the social issues and lived experiences that impact patients' lives and health. They often identify social issues that are undetectable to others. Their insights and strong relationships with patients allows community health workers to connect patients with appropriate resources in a meaningful way, making the community health worker model of care ideal for addressing this problem.

The patients served by Queen's Care Coalition, referred to as *super utilizers,* are defined by the program as having 15 or more Queen's Emergency Department (QED) visits within a quarter, 3 admissions to QMC within a quarter, or a total of 15 days hospitalized at QMC in a quarter. In addition to meeting utilization criteria, patients must have identified social determinants of health needs. According to the US Department of Health and Human Services, "Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks."[4] The Queen's Care Coalition rationale for screening high utilizers for social determinants aligns with the US Department of Health and Human Services' message to "move beyond controlling disease to address factors that are root causes of disease."[4] By attending to underlying social determinants, health care providers have the ability to impact patient health outcomes while decreasing acute care utilization and healthcare costs.[5] The social determinants most often identified for Queen's Medical Center super utilizers are in the areas of employment, food insecurity, housing instability, poverty, discrimination, social cohesion, incarceration, health literacy, crime, and violence.

Patients who meet program criteria are identified by utilization reports generated from electronic medical record and chart review data. The team is comprised of 5 navigators, 1 Licensed Clinical Social Worker (LCSW), and 1 part-time Medical Director/QED Physician. Four navigators have completed the Community Health Worker (CHW) certificate program through Kapi'olani Community College. Navigators carry relatively small caseloads of 10-12 patients, which allows for frequent, sometimes daily contact with patients. Intense navigation services are provided for 30-90 days. Services are driven by the navigators with the LCSW providing clinical supervision to the navigators and therapeutic intervention to patients as needed. The medical director assists with case reviews for medical recommendations and drives program growth and development on a macro level.

Throughout navigation services, Queen's Care Coalition navigators use an approach rooted in harm reduction. According to the Harm Reduction Coalition, harm reduction is "a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use."[6] Queen's Care Coalition navigators expand this definition to include the goal of reducing the negative consequences associated with not just drug use, but also with homelessness and high-risk health behaviors including non-adherence to medical recommendations and medication noncompliance. Navigators focus on positive changes and work with patients without judgement; they do not require patients to stop using drugs, or to comply with all recommendations as a condition of services and support.[7] Navigators meet with patients "where they are" both literally and figuratively. Most contact consists of face-to-face visits in patients' chosen location, including parks, sidewalks, and homeless encampments. No-shows are expected and not penalized. Incremental positive changes are celebrated.

The navigator first encounters the patient at their bedside during a QED visit or hospitalization and asks for consent to provide services. Navigators begin building rapport by "talking story" and identifying patients' strengths. Navigators encourage self-determination by allowing patients to identify their current needs and barriers to accessing healthcare and services in the community. Together the patient and navigator create and agree upon an action plan to begin to address those needs after discharge from QMC.

While building this foundation of trust with the patient, the navigators concurrently collaborate with community resources already in place—such as behavioral health case managers, insurance service coordinators, and agencies that assist people who are homeless—to activate the patient's support system for ongoing care and to obviate duplication of services. At the end of the navigation period, a transitional meeting is held to establish a warm hand-off to community providers, with concrete plans to continue forward momentum.

Program Outcomes

Initial goals for Queen's Care Coalition included reduction in QED utilization by 10% and reduction in number of days hospitalized at QMC by 10%. From the program's inception in November 2017 to January 2019, 143 individuals were provided navigation services. Of these individuals, 89% (127) were homeless prior to navigator intervention, 55% (79) had a documented history of substance use, and 45% (64) had a behavioral health diagnosis. To date, the success of the program has exceeded initial goals, with QED utilization decreasing by 75% and hospitalized days decreasing by 33% for those super utilizers who received navigation services.[8] The financial impact, to both the healthcare organization and the health plans for all super utilizers who have received Queen's Care Coalition navigation services is currently being analyzed and preliminary data is promising.

Queen's Care Coalition has expanded and now includes 3 navigation teams, each serving a unique population: *Ke Ku'una Na'au* serves Native Hawaiian patients admitted to QMC who are at risk for readmission due to chronic medical conditions, behavioral health problems, and/or psychosocial stressors; myConnections navigation team screens high risk Medicaid and Medicare beneficiaries for social determinants and provides referral and navigation services; and the super utilizer navigators continue to serve the same population described above. The following case study illustrates the navigator role in providing low-threshold, harm-reduction navigation services and community linkages to increase super utilizers' access to healthcare and reduce unnecessary hospital utilization.

Case Presentation

Mr. D was a 48-year-old white man with a past medical history significant for liver disease, anemia, frequent falls due to unsteady gait, asthma, chronic pancreatitis, chronic wounds related to methicillin-resistant *Staphylococcus aureus* infections, seizures related to alcohol withdrawal, bipolar disorder, and alcohol use disorder. He had a history of unsheltered homelessness on O'ahu for the past 15 years. Mr. D had multiple emergency room visits due to alcohol intoxication, falls, and assaults, and had hospitalizations related to flare-ups of chronic medical conditions. While in the QED, Mr. D often reported tingling in his limbs and difficulty with word-finding and speech, which prompted referrals to specialists. In the 4 months prior to navigator intervention, Mr. D was seen in the QED 12 times, resulting in 5 hospital admissions and 44 hospitalized days.

Despite having multiple chronic medical and behavioral health conditions, Mr. D had not visited a primary care provider (PCP) in 3 years and took medications for his chronic conditions only sporadically, on the occasions when he received a 3- or 7-day supply in the QED. Mr. D reported that the medications provided were frequently stolen on the street. Mr. D had a Medicaid health plan. Mr. D did not follow up with the specialists he was referred to. While in the QED, Mr. D often expressed a desire to quit drinking alcohol. He was referred to and accepted by a substance abuse detoxification program from the emergency department approximately 15 times in 5 years. Upon completion of the 7-day social detoxification program, he returned to homelessness and begin drinking again. He consistently declined referrals to residential substance abuse treatment centers. Mr. D also declined referrals to homeless shelters due to being unable/unwilling to follow shelter rules and wanting to remain with his girlfriend, who was also homeless. He had no identification documents and received no government assistance.

Navigator Intervention and Outcome

The navigator first met Mr. D during an emergency room visit when he presented for a wound on his foot. She explained the program, received Mr. D's consent to navigation services, and proceeded with an initial meeting that was conversational. During the initial meeting, the navigator identified that Mr. D's strengths included dedication to his girlfriend, a sense of humor, a polite and personable demeanor, and knowledge of many existing homeless services. Mr. D was discharged from the QED and the navigator arranged to meet with Mr. D the following day at the park where he lived in with his girlfriend.

During their next meeting, at the park, the navigator asked Mr. D questions about his background, his current daily routine, and his hopes for the future. The navigator gleaned that Mr. D valued health because he expressed concern about his increasingly limited mobility, hindering his ability to protect his girlfriend on the street. Mr. D shared that he was often afraid of what would happen to him if his girlfriend left since she helped steady him when he walked. The navigator learned that Mr. D did not know if he had a PCP or how to access one and that his identification had been stolen years ago and he had not replaced it. Mr. D explained that he usually began drinking around noon and would consume "about a gallon of vodka a day, every day." While he acknowledged his alcohol intake was "maybe too much" he did not identify this as a barrier to care. Mr. D and his girlfriend were clear that the security of being in stable housing together was their priority.

Over the next 90 days, the navigator continued to meet with Mr. D and his girlfriend multiple times per week and connected them with existing community service providers to work toward Mr. D's goal of permanent housing and increased wellness. Listed in no specific order, the following community linkages were made:

- *Partners in Care Coordinated Entry System* for permanent supportive housing voucher
- *Institute for Human Services* for housing navigation into permanent housing
- *Institute for Human Services, Hale Mauliola* for temporary housing until permanent housing was secured
- *Queen Emma Clinic* for primary care, social work, referrals to specialty doctors, disability verification
- *Legal Aid Society of Hawai'i* for documentation necessary for housing
- *Hawai'i Medical Service Association (HMSA) Quest* for service coordinators for arranging home health services and providing ongoing medical care coordination
- *QMC* staff chaplain for spiritual support
- *QMC Outpatient Speech Therapy*
- *QMC Outpatient Occupational Therapy*
- *Queen's Counseling Services* for psychiatry services
- *Hawai'i Pacific Neuroscience* for outpatient neurology
- *Hawai'i Department of Human Services* for general aide
- *Gino Clinic* for psychotherapy
- *Islands Hospice* for end-of-life care

Initially the navigator attended all appointments with Mr. D, but as his self-navigation skills increased, she encouraged him and his girlfriend to schedule and attend appointments on their own. The navigator used motivational interviewing techniques to address Mr. D's ambivalence about alcohol use and he chose to cut back, drinking only on the weekends so he would be able to make it to all his appointments. He and his girlfriend secured permanent housing and he continued to attend outpatient PCP and specialty appointments in the community. He initiated psychiatry and psychotherapy to address previously untreated bipolar disorder and anxiety.

Mr. D's QED and hospital utilization decreased. In the 4 months following the navigator's intervention, Mr. D presented to the QED 2 times and was admitted once, resulting in 4 hospitalized days. Mr. D's total cost of care (which includes all inpatient and outpatient services island-wide, as well as ambulance utilization) 6 months prior to navigator intervention was $92,550 and 6 months post navigator intervention was $23,067; a total cost-of-care savings of $69,483 to the payer. The month the navigator began working with Mr. D was counted in the pre intervention cost.

At the completion of Queen's Care Coalition navigation services, the navigator arranged a transitional meeting with Mr. D, his girlfriend, and his community care team to provide a warm hand-off. The navigator provided Mr. D with a binder of information detailing each person's role, contact information, and next steps so Mr. D knew who to call for assistance. About 6 months after termination of navigation services, Mr. D was readmitted to Queen's Medical Center for liver failure. The treatment team discussed options for care and Mr. D elected to return home with hospice services. Mr. D died at home in his bed with his girlfriend at his side 5 days later.

Social Worker Role

As defined by the Queen's Care Coalition program model, throughout this case, the navigator and the program social worker consulted in supervision sessions at least once a week to discuss Mr. D's progress toward his goals, problem solve around the barriers to reaching those goals, and analyze the navigator's feeling about this case. A collaborative, trusting relationship between the program social worker and navigator allowed for both to safely share their thoughts and feelings without fear of judgment. During supervision, the social worker also provided the navigator with education on available resources, helped facilitate referrals, and made recommendations for next steps. In this case, the navigator and social worker agreed that more intensive support would benefit Mr. D and his girlfriend, and the social worker met with Mr. D and the navigator multiple times both in the hospital and in the community to provide substance use education, motivational interviewing, and brief family therapy. Mr. D identified that the additional support of the social worker made him feel that he had a whole team of people helping him toward his goals. The navigator and social worker both expressed feeling grateful to have each other to process the emotions they experienced when Mr. D died.

In a hospital setting, social workers may find super utilizer patients difficult to engage due to patients' mistrust of the system and perceived misaligned goals. In this case, the Queen's Care Coalition program social worker greatly valued and relied on the patient relationship developed by the navigator, and the patient insights the navigator gained to enable and even inspire clinical interventions otherwise inaccessible to the social worker. The program social worker reported increased effectiveness and professional satisfaction due to working with navigators in this program model.

Lessons Learned from the Navigator's Perspective

Mr. D was one of the first patients the navigator encountered in her role as a patient community navigator with Queen's Care Coalition. Mr. D's main goal was to have a home before Christmas so that he and his girlfriend could celebrate Christmas in a safe place with a Christmas tree. The navigator used his identified goal and motivated him to keep moving forward, instead of focusing on goals determined by his medical treatment team. The navigator also learned that, when she also attended the appointments, Mr. D was less likely to be treated as "invisible" or immediately labeled as "non-compliant" by the physicians or staff in the clinics. With the navigator sitting next to him at the appointments, he was treated as a "person of worth" and his concerns about his medical condition were heard. The navigator believes this led to necessary referrals to specialty clinics.

The navigator learned about available resources, the value of community collaboration, and the necessity of partnerships with involved service providers to continue supporting the changes made. During their time together, Mr. D taught the navigator to never give up, to listen, to not judge, and always to have hope. All of these lessons have served as building blocks for the navigator to use with subsequent patients.

Practical Implications

Super utilizer patients with psychosocial issues are often labeled "resistant to care" and "non-compliant" in the medical field. This case study illustrates that with support from a hospital-based navigator, members of this population may be responsive to care, their health outcomes can be improved, and unnecessary hospital utilization can be reduced. While the Queen's Care Coalition has found significant success with this model, patients who are incarcerated while receiving navigation services, or those who exhibit violence or experience psychosis, can be beyond the program's ability to engage and meaningfully impact. Nonetheless, patient navigators are ideally suited to play a central role in connecting many super utilizer patients with existing community resources. The combination of a patient-centered, harm-reduction framework, advocacy skills, and a deep knowledge of community resources allows navigators to enhance the delivery of care in a manner that is both effective and cost reducing. This partnering of a navigator with a patient improves accesses to care, compliance with discharge plans, and strengthens patients' ability to self-navigate in the future.

Conflict of Interest

None of the authors identify any conflicts of interest.

Authors' Affiliation:
The Queen's Medical Center, Honolulu, HI

Correspondence to:
Ashley J. Shearer MSW, LCSW; Email: ashearer@queens.org

References

1. Hawaii Health Information Corporation. Homelessness and the impact of healthcare, an overview. https://hhic.org/downloads/homelessness-and-the-impact-on-healthcare-an-overview/. Published September 2017. Accessed April 7, 2019.
2. Hawaii Healthcare Association of Hawaii. Laulima Data Alliance: Homelessness Data. 1/1/2016 – 9/30/2018.
3. Cohen S. The Concentration of Health Care Expenditures and Related Expenses for Costly Medical Conditions, 2012. Statistical Brief #455. Agency for Healthcare Research and Quality, Rockville, MD. http://www.meps.ahrq.gov/mepsweb/data_files/publications/st455/stat455.shtml. Published October 2014. Accessed January 1, 2019.
4. US Department of Health and Human Services. Healthy People 2020 an opportunity to address societal determinants of health in the United States. https://www.healthypeople.gov/sites/default/files/SocietalDeterminantsHealth.pdf. Published July, 26 2010. Accessed April 7, 2019.
5. Schroeder SA. We Can Do Better - Improving the Health of the American People. *New England Journal of Medicine*. 2007;357(12):1221-1228. doi:10.1056/nejmsa073350.
6. Principles of harm reduction. Harm Reduction Coalition. https://harmreduction.org/about-us/principles-of-harm-reduction/. Accessed April 7, 2019.
7. Hawk M, Coulter RWS, Egan JE, et al. Harm reduction principles for healthcare settings. *Harm Reduction Journal*. 2017;14(1). doi:10.1186/s12954-017-0196-4.
8. The Queen's Medical Center Super Utilizer Data Base, 2018. (This database is the private property of QMC used in an official capacity as part of our data collection and reporting role in the Queen's Care Coalition.)